

ENGINEERING TECHNICIAN

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DEPARTMENT: Development Management/Engineering

NATURE OF WORK:

Performs advanced technical, administrative and computer aided drafting for work of a complex and responsible engineering nature relating to the design of utilities, streets, drainage facilities, and sidewalks.

Performs advanced technical work in the oversight and inspection of design and construction of streets and drainage facilities for compliance with applicable construction standards and regulations.

The employee contacts property owners for acquisition of easement and "fee simple" rights-of-way for street, utility, or other public works construction projects.

ESSENTIAL FUNCTIONS OF THE JOB:

Participates in all phases of design and construction, including technical oversight and computer applications; review of plans and specifications for compliance with rules, regulations, and standards; preparation of detailed cost estimates; and receives and responds to technical questions from engineers, contractors, County personnel and general public.

Participates in the collection of technical engineering data; performance of engineering computations; performs analysis of collected data; makes recommendations; and assists in the preparation of technical studies and reports.

Designs and drafts, by computer methods, preliminary and final construction plans.

Administers surveying, design, and construction contracts.

Performs inspections of street and sidewalk construction sites to ensure that projects are in compliance with County Ordinances and approved plans. Advises engineers and contractors of any problems or conflicts for correction.

Reviews subdivision and site plans for compliance with County's Private Street Design and Construction Guidelines.

Conducts field conferences and inspections with contractors, engineers, planning, and zoning personnel. Informs engineers and contractors of any problems or deviations from approved plans and specifications and supervises corrective action.

Documents inspections and prepares reports. Maintains project activity and progress records.

Provides construction supervision and contract administration.

Acts in the absence of the supervisor when designated.

Contacts property owners to secure easements and "fee simple" rights-of-way.

Interprets construction plans, easements, plats, and deeds to property owners for identification of easement or right-of-way boundaries and area to be taken for construction.

Researches courthouse records to determine property ownership.

Assists in the development of site plans and construction plans by utilizing computer aided drafting software as well as board drafting.

Acts as liaison between property owners and County concerning property status, plans, and other data requiring revisions to property deeds or plats.

Performs work safely in accordance with departmental safety procedures and the County Safety Program. Operates equipment safely and reports any unsafe work condition or practice to supervisor.

Performs related work as required.

JOB LOCATION AND EQUIPMENT OPERATED:

Duties are performed in an office and at various construction sites and facilities located throughout the County. Drives County vehicle to work sites. Requires extensive walking, frequently over rough terrain. Some duties are primarily performed outdoors in all weather conditions.

REQUIRED KNOWLEDGE, SKILLS, AND ABILITIES:

Ability to use computer hardware and software for engineering, technical, administrative, and computer-aided drawing applications.

Ability to organize project assignments, to obtain and apply data, and to analyze and process such information.

Extensive knowledge of the principles, techniques, and equipment used in street, sidewalk, drainage and utility construction.

Thorough knowledge of the principles and practices of engineering as applies to construction of improvement projects.

Considerable knowledge of computer programs: AutoCad, Excel, WordPerfect.

Ability to establish effective working relationships with County officials, contractors, property owners, and the general public.

Ability to read and interpret blueprints, engineering plans, and specifications.

Ability to make accurate mathematical calculations.

Ability to maintain records and prepare clear and concise reports.

Ability to perform taxing physical activity, including walking, climbing, stooping and bending.

Considerable knowledge of basic terminology and procedures used in describing real estate.

Considerable knowledge of procedures for establishing right-of-way for public projects.

Considerable knowledge of the principles, techniques, and equipment used in street and utility construction.

Ability to read and interpret right-of-way boundaries from construction plans and easement plans.

Ability to develop and maintain cordial and effective relationships with property owners.

MINIMUM QUALIFICATIONS:

Graduation of high school and completion of a two-year college curriculum with an Associate's Degree in engineering, or a related field, supplemented by courses in computer aided drafting and computer systems; or any equivalent combination of training and experience which provides the above knowledge, skills, and abilities.

NECESSARY SPECIAL QUALIFICATIONS:

Must possess a valid Virginia driver's license and have an acceptable driving record based upon James City County's criteria. Must have considerable knowledge of computer aided drafting techniques.